



Women Farmers Awareness in Stunting Prevention Actions through the Community Development and Empowerment Program (Pro-Bebaya) in North Samarinda District, Indonesia

Dina Lesmana ^{a*}, Qurratu Aini ^a and Saripah Nurfillah ^a

^a Department of Agribusiness, Faculty of Agriculture, Mulawarman University, Indonesia.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JAERI/2023/v24i6563

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/109410>

Original Research Article

Received: 17/09/2023
Accepted: 23/11/2023
Published: 27/11/2023

ABSTRACT

Stunting is a chronic nutritional problem that results in impaired child growth. To reduce the prevalence of stunting, preventive action is needed, in this case in the form of maternal behavior in efforts to prevent stunting in the family. The Samarinda City Government is committed to carrying out integrated actions to accelerate the reduction in the number of stunting cases through the community development and empowerment program (Pro Bebaya) especially in rural areas. Awareness of farming households, especially women farmers, in taking action to prevent stunting is very important. This research aims to provide an overview of the behavior of women farmers as a form of awareness in efforts to prevent stunting in farming families through their knowledge about stunting, providing exclusive breast milk, complementary food, and a clean and healthy lifestyle (PHBS), attitudes and actions taken to prevent it. stunting which then creates awareness for

*Corresponding author: E-mail: dinalesmana78@gmail.com;

preventing stunting in farming families. The design of this research is cross-sectional. The total sample of 59 was selected purposively, namely female farmers, and farmer's wives who have children aged 0-2 years) who are active in posyandu activities. The data analysis method used descriptive associative analysis and bivariate Spearman Rank Correlation. The results of the research show that there was a very weak and unidirectional correlation (-) between age, working status, and the number of children in women farmers' awareness of preventive action against stunting, while the relationship was very weak in the same direction (+) only with the education factor. The relationship between knowledge, attitudes, and stunting prevention actions on women farmers' awareness of preventive actions showed a strong and significant correlation at 0.01.

Keywords: Awareness; women farmers; stunting; preventive action; Pro-Bebaya.

1. INTRODUCTION

Stunting is a chronic nutritional problem that results in impaired child growth. Stunting sufferers usually have a lower height or are stunted compared to their age standard. This condition is caused by a lack of nutritional intake for quite a long time [1]. This problem has become a serious concern for the Samarinda City Government to hold a discussion entitled Rembuk Stunting. This consultation is one of eight integrated actions by the City Government to accelerate the reduction in the number of stunting cases in Samarinda by committing to solving the stunting problem. A generation that grows up healthy, superior, religious, competitive, and cultured is believed to be able to advance the country. In this case, the Samarinda City government is paying serious attention to stunting so that the nation's children are born with quality, morals, and good character. In every sub-district and sub-district through Pro-Bebaya to increase the effectiveness of integrated service center (posyandu) activities for toddlers.

According to [2] there are 1,988 family assistance teams consisting of elements of family welfare empowerment or PKK, family cadres, and midwives who are distributed to all villages/sub-districts throughout East Kalimantan to provide understanding and assistance to families at risk stunting. According to [3] the prevalence of stunting in East Kalimantan in 2021 reached 22.8 percent. The three regions with the highest number of stunting cases are East Kutai 27.5 percent, North Penajam Paser 27.3 percent, and Kutai Kartanegara 26.4 percent. The target for prevalence is expected to decrease to 12.83 percent in 2024.

Several efforts to reduce the number of stunting cases. Some of these include improving the quality of preparation for family life, ensuring

adequate nutritional intake, improving parenting patterns, increasing access and quality of health services, and increasing access to drinking water and sanitation. For this reason, there was a need for awareness efforts, especially for women farmers, in stunting prevention actions through the Pro Bebaya program (Development and Empowerment Program) in Samarinda City. Pro Bebaya is the number one program out of ten superior programs from Samarinda City for the 2021-2025 period [4].

Based on stunting risk data, Samarinda City, of the 168,485 families in Samarinda, 53,13 families or 31.53 percent of them are at risk of stunting. In 2020 in Samarinda City, stunting cases experienced by 1,402 toddlers were experienced by toddlers, consisting of 403 toddlers in the very short category and 999 toddlers in the short category). It was recorded that 995 toddlers in Samarinda were short and 408 toddlers were very short. Meanwhile, 8.35 percent of people lack nutrition and are 10.8 percent underweight [5]. Based on research carried out by the Health Research and Development Agency of the Ministry of Health in collaboration with the Central Bureau of Statistics (BPS) the stunting rate in Samarinda reached 21.6 percent [6]. This figure is still considered high because the Indonesian government is targeting a reduction in stunting by 14 percent by 2024. The 2021 stunting prevalence rate in East Kalimantan is below the national average. The national stunting prevalence rate is 24.4 percent, while East Kalimantan's figure is 22.8 percent [7].

The problem of stunting is clear, one part of Double Burden Malnutrition (DBM) has a very detrimental impact both in terms of health and in terms of economic productivity in the short and long term. In the short term, stunting is related to the development of brain cells which will ultimately cause the level of intelligence to be less than optimal. Meanwhile, in the long term,

children's cognitive abilities will be lower and ultimately reduce productivity and hinder economic growth. With the promulgation of Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting Reduction [8], one of the mandates that must be implemented immediately is to form a Team for the Acceleration of Stunting Reduction (TPPS) at the Provincial Level, TP2S at the District/City Level up to TPPS at the Village/District Level. At the provincial level, a Stunting Reduction Acceleration Team (TPPS) has been formed with Governor's Decree Number 463/K.159/2022 concerning the Establishment of the East Kalimantan Province Stunting Acceleration Reduction Team, on March 14, 2022. The East Kalimantan Provincial Health Service recorded the prevalence rate of stunting (under-fives, short) in the province experienced a decline of 5.29 percent in two years, namely from 28.09 percent in 2019, down to 22.8 percent in 2021 [9].

Lempake Village, North Samarinda District, was chosen purposively because it is still an agricultural area, the seat of the Suluh Manuntung Agricultural Extension Center, and there is a women's farmer group as well as a center for toddler posyandu activities. The target groups are women farmers, in this case, farmers' wives who are couples of childbearing age (PUS), and breastfeeding mothers (children aged 0-2 years). This research aims to find out the extent of their awareness of stunting prevention actions which are part of the Samarinda City Pro Bebaya program. To find out awareness of stunting prevention actions, this is done by measuring the extent of their knowledge, attitudes, and actions for stunting prevention actions, especially in providing family food during this time.

Based on the description of the background of the problem above, it is necessary to make public awareness efforts to prevent stunting so that health problems, especially stunting, do not spread and increase, especially in Samarinda City. This research is also linked to the Pro Bebaya program (Community Development and Empowerment Program) run by the City Government during the current leadership period. Pro Bebaya is a program to accelerate development and improve regional (RT)--based community welfare [10]. In general, the goal is that problems in society are handled quickly and appropriately. Then development is based on community needs, right on target and on time,

with the concept of the community, by the community, and for the community. The Samarinda City Government is very concerned with handling stunting prevention by continuing to socialize it through the PKK program, posyandu, and coordinating with the provincial-level stunting prevention acceleration team to reduce the stunting rate in Samarinda City. Samarinda City's stunting rate this year reached 9.8 percent, lower than last year's 10.74 percent. With progress, the entry target has increased to 85.6 percent from 67 percent in 2021 [11]. Weighing and measurement results for this year have increased by 37.1 percent from 29.16 percent in 2021. The hope is that with socialization and awareness, the stunting rate in the city of Samarinda can improve by utilizing Pro-Bebaya funds to improve and provide sanitation.

In this research, researchers used Paulo Freire's Awareness theory and Albert Bandura's social learning theory which focuses on learning by observing correct activities and acting by recommendations, in this case stunting prevention behavior. Therefore, researchers are interested in researching community awareness efforts, in this case, women farmers, to prevent stunting, especially in rural areas. Lempake Village, North Samarinda District, which is the seat of the Agricultural Extension Center, was chosen as the research location. For this reason, this research has the title "Awareness of Women Farmers in Stunting Prevention Actions in the Community Development and Empowerment Program (Probebaya) in North Samarinda District, Samarinda City"

2. METHODS

2.1 Time and Place of Research

This research was carried out for 3 months, starting from June to August 2022. The research location was in Lempake Village, North Samarinda District, Indonesia This sub-district was chosen purposively because it is an agricultural area and is the seat of the Suluh Manuntung Agricultural Extension Center.

2.2 Methods

The type of data required in this research consists of primary data and secondary data. Primary data was obtained through a survey using a list of research-related questions. Primary data consists of the characteristics of female farmers, namely farmers' wives, who are

breastfeeding and have children aged 0-2 years) and actively participate in posyandu activities for 3 consecutive months. Secondary data was obtained from various agencies related to research, including the Samarinda City Health Service, East Kalimantan Province BKKBN, Samarinda City Population Control and Family Planning Service, Suluh Manuntung Agricultural Extension Center, North Samarinda District Office, Lempake Village Office, Lempake Community Health Center, Central Agency Samarinda City Statistics, as well as various literature and publications related to the same research topic. This type of research is descriptive research, namely research directed at describing or describing a situation in a community or society objectively. This research uses a survey method with the types of data processed being qualitative and quantitative data. This research was carried out at a posyandu in Lempake Village within the working area of the Lempake Community Health Center, Lempake Village, North Samarinda District. The population in this study were women farmers

who were farmers' wives who had children aged 0-2 years and actively participated in Posyandu activities. The sampling technique in this study used the purposive sampling method at posyandu whose areas were mostly agricultural [12]. The number of samples in this research was 59 respondents. In-depth interviews were conducted with farmers' wives who met the criteria as respondents to find out the extent of awareness in preventing stunting in children through providing family food.

To find out the level of awareness of women farmers in stunting prevention actions, interviews were conducted through questionnaires using 3 indicators, namely knowledge, attitudes, and actions to prevent stunting in farmer households.

The framework of women farmers' awareness in stunting prevention actions through the community development and empowerment program (Pro-Bebaya) in North Samarinda District, Samarinda City presented in Fig. 1

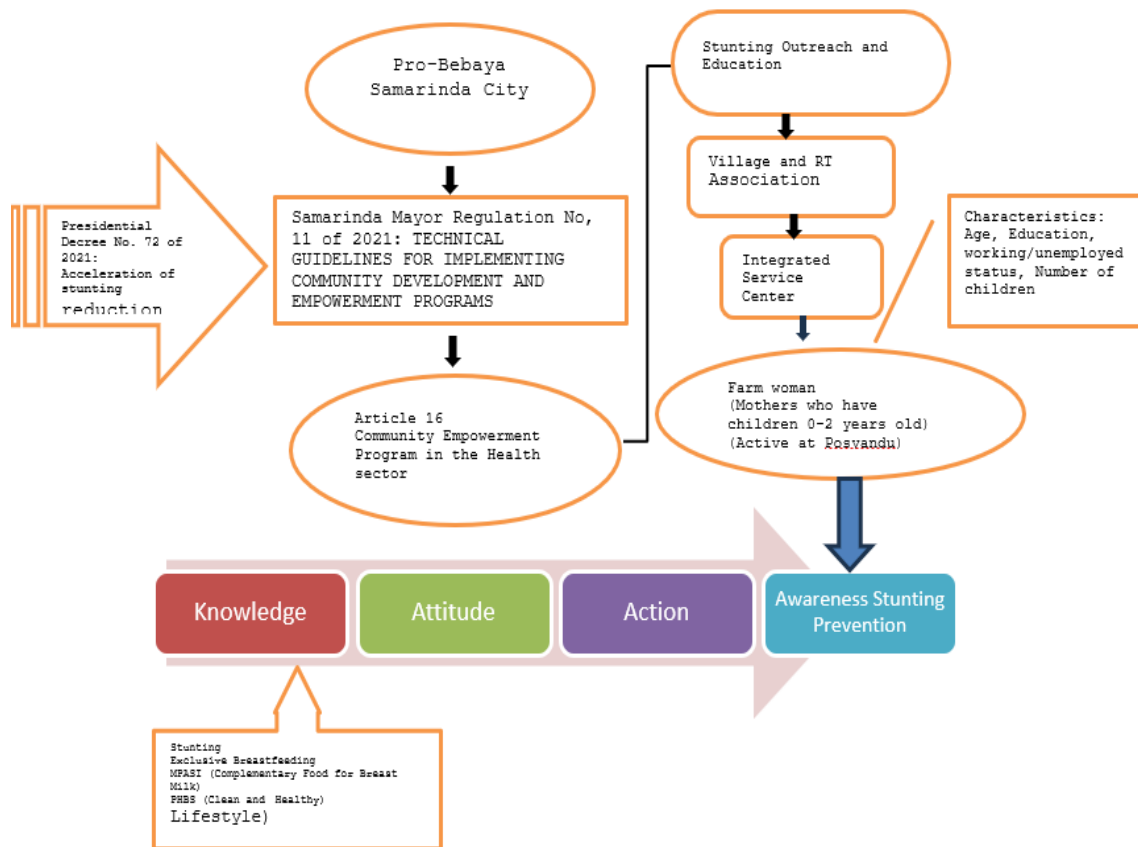


Fig. 1. The framework of women farmers' awareness in stunting prevention actions through the community development and empowerment program (Pro-Bebaya)

3. RESULTS AND DISCUSSION

3.1 Demographic Characteristics of Women Farmers

The results of the research show that the average age of the female farmers studied was 29 years, entering the early adulthood category. Based on the age classification of the Indonesian Ministry of Health in 2009 [13], 29 years old is included in the early adulthood category. The age range for early adulthood is 26-35 years, this age is a period of independence, both in terms of economics, freedom to think, act, make decisions, and be more realistic. Based on the research results, show that 63% have an average secondary education (SMA), this shows that the more educated women farmers are, the more open their thoughts and ways of thinking, their understanding so that in taking action they have the awareness to play an active role such as participating in posyandu activities, being active in providing nutritional intake to children who are in their growing age. In aspects related to working status or not, the research results show that 73% of women farmers also work, especially jobs outside of farming. The research results also show that women farmers work on average as shop employees and teachers with the motivation to help the family economy apart from farming. The average number of children they have is 2 children (64%), in terms of young age and current developments, the average is around 1-2 children, if you already have 4 children in the current era, it is considered that there are too many, this is different With the conditions in which parents used to live, the

concept of having many children became a hope for getting a lot of good fortune. This mindset is shifting now considering that husband and wife couples in the household will think about the economy and education in the future, as well as the ability to provide quality education to children. The distribution of data according to respondent characteristics can be seen in Table 1

3.2 Correlation of Demographic Characteristics with Women Farmers' Awareness of Actions to Prevent Stunting

The results elowof the research (Table 2) Correlation between women farmers' demographic characteristics and their awareness about preventing actions for stunt show that the correlation based on the demographic characteristics of women farmers in stunting prevention actions on age, occupation, and number of children is not in the same direction (negative) and has a very weak relationship, this is indicated by the Spearman Rank coefficient (rho) value in the range (-0.049-(-0.091). A unidirectional relationship with a very weak correlation is only shown in the characteristics of female farmers based on education. In terms of age characteristics, those who are aware of stunting prevention actions are 34% in the early adult age range, while 32% are quite aware. Awareness of women farmers in preventing stunting is 42% among working women, this is also in line with research conducted by [14].

Table 1. The demographic characteristics of the female respondents from Samarinda District

Variable	Category	Frequency (people)	Percentage (%)	Average
Mother's age(year)	Teenagers(17-25)	21	36	29,0169 (Early adulthood)
	Early adulthood (26-35)	33	56	
	Late adulthood (36-45)	5	8	
Education	Elementary (SD)	0	0	Senior High School
	Intermediate(Middle-Senior High School)	37	63	
	High School	22	37	
	High (D3-S1)			
Job	Employed	42	71	Work
	unemployed	17	29	
Number of children	1-2	38	64	2,2542 (2 child)
	3-4	21	36	
	>4	0	0	

Authors' survey data

Table 2. Frequency distribution based on respondents' demographic characteristics regarding awareness of stunting prevention actions

Variable	Category	Awareness (%)				Spearman (rho)	Significance	Correlation relationship
		Kurang	Cukup	Sadar	Total			
Mother's Age (Year)	Late teens (17-25)	0	6(10)	8(14)	14(24)	-0,046	0,730	Not in the same direction (-) and very weak
	Early adulthood (26-35)	0	19(32)	20(34)	39(66)			
	Late adulthood (36-45)	0	4(7)	2(3)	6(10)			
Education	Elementary (SD)	0	0	0	0	0,141	0,286	
	Intermediate(Middle-Senior High School)	0	21(36)	17(29)	38(64)			
	High (D3-S1)	0	7(12)	14(24)	21(36)			
Job	Work	0	17(29)	25(42)	42(71)	-0,079	0,551	Not in the same direction (-) and very weak
	No Work	0	12(20)	4(7)	17(29)			
Amount of Children	1-2	0	18(30)	20(34)	38(64)	-0,091	0,494	Not in the same direction (-) and very weak
	3-4	0	10(17)	11(19)	21(36)			

Source: Processed Data (N=59)

Table 3. Average categories per indicator of women farmers' awareness of stunting prevention actions

No	Variable	Average Score Total	Total Category	Category
	Knowledge			
	Stunting	10,66102	629	Enough
	ASI Eksklusive	10,16949	600	Good
	MP ASI	7,644068	451	Good
	PHBS	11,42373	674	Enough
2	Attitude	6,677966	334	Enough
3	Actions to prevent stunting	9	531	Good
4	Awareness	55,576271	3279	Aware

Source: Processed data

Table 4. Categories, mean value, SD, spearman rank correlation, and level of relationship per variable in awareness of stunting prevention actions among female farmers in 2023

No	Variable	Category n (%)			Mean	SD	Spearman (rho)	Correlation relationship
		Good	Enough	Not Enough				
1	Stunting Knowledge	21(36)	27(46)	11(18)	10,66	2,34	0,650**	Strong
	ASI Eksklusive	41(69)	15(25)	3(6)	10,17	1,66	0,694**	Strong
	MP ASI	39(66)	14(24)	6(10)	7,64	1,26	0,641**	Strong
	PHBS	18(30)	33(56)	8(14)	11,42	1,89	0,683**	Strong
2	Attitude	15(25)	29(50)	15(25)	6,68	1,21	0,743**	Strong
3	Actions to prevent stunting	10(17)	34(58)	15(25)	9	1,81	0,700**	Strong
4	Awareness	30(51)	29(49)	0	55,58	7,12		

Source: Processed Data; ** significant correlation at 0.01 level (2 Tailed)

3.3 Correlation of Knowledge, Attitude, and Action Towards Awareness of Women Farmers In Preventing Stunting

The relationship between farmer women's knowledge and awareness of stunting prevention actions can be seen from farmer women's knowledge of stunting itself, how to provide exclusive breast milk to babies aged 0-2 years, and knowledge about how to give and prepare food. The results of research using univariate and bivariate analysis are presented in Table 3.

The research results showed that 55,57% of respondents had a good awareness of stunting prevention actions. Of the knowledge indicators, the knowledge category is quite good, namely knowledge about stunting and PHBS.

3.4 Stunting Prevention Action through the Development and Empowerment Program (Pro Bebaya) in Samarinda City

The main problem in reducing stunting in Samarinda is public awareness and the important role of posyandu in providing health services to mothers and children. Efforts to accelerate stunting reduction through the Samarinda City development and empowerment program (Pro Bebaya) are carried out by holding stunting prevention outreach in every neighborhood and providing family assistance by appointing a Family Assistance Team (TPK) in every sub-district and every RT and continuing to optimize the role of posyandu. Through posyandu, stunting prevention is carried out by providing complementary foods for breast milk, providing information about environmental cleanliness, the importance of nutritious food, as

well as the importance of environmental cleanliness and family food safety. The research results show that the awareness of female farmers is still 51%, so their awareness needs to be further increased by continuing to assist, especially in early adulthood who are canteens (prospective brides) so that action to prevent stunting can be anticipated as early as possible.

4. CONCLUSIONS AND SUGGESTION

4.1 Conclusions

1. The relationship between the demographic characteristics of women farmers and the awareness of women farmers in stunting prevention actions in the Lempake sub-district, North Samarinda District is very weak and not in the same direction (negative) except that the education aspect shows a positive relationship although it is very weak, this is due to the condition of the area close to access to the provincial capital, access to communication and also quite intensive outreach on stunting prevention by sub-district and sub-district parties so that most are aware of preventing stunting by providing nutritious food intake to families.
2. Awareness of women farmers in action to prevent stunting includes knowledge about stunting, knowledge about exclusive breastfeeding, knowledge about complementary foods for breast milk, knowledge about clean and healthy lifestyles, readiness to prevent stunting, and action in the form of real action to prevent stunting. Farming women's knowledge of stunting is quite good, while knowledge of exclusive breastfeeding, MPASI, and PHBS is good. Attitudes and actions to prevent stunting among female farmers are in the quite good category
3. Awareness of women farmers in a preventive action against stunting has a strong, significant correlation in the same direction (+) with knowledge, attitudes, and actions of women farmers so that in general women farmers' awareness of action to prevent stunting is 51% in the awareness category with an average score of 55.58.
4. The Samarinda City government's regional-based Development and Empowerment Program (Pro Bebaya)

through RT provides many positive benefits by continuing to socialize stunting prevention per RT area, apart from that, through posyandu and Dasawiswa providing training and assistance to women farmers to be able to provide nutritious food to early childhood to accelerate stunting reduction in Samarinda City.

4.2 Suggestion

1. Awareness still needs to be increased by continuously providing outreach on stunting prevention through meetings at Posyandu and at RT forums and Dasawisma associations. This is done so that stunting reduction can be accelerated, remembering that for Samarinda City the stunting rate is still 21% from 14% for 2024.
2. increase the active participation of family members to prevent stunting to follow education and g situational
3. Pro Bebaya as a program from the Samarinda City Government is very helpful in increasing awareness of female farmers for stunting prevention at the RT area level, the role of family companions in socializing stunting prevention, and providing additional food after breast milk as well as food diversification in the family as well as socializing clean and healthy lifestyles. by starting with CPTS (washing hands with soap), especially for children.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Indonesian Ministry of Health. Indonesian Health Profile. Vol. 53. Jakarta; 2019. 1689–1699 p.
2. <https://kaltimkece.id/rupe/kesehatan/408-balita-di-samarinda-berbangun-besar-cepat-stunting-jadi-perhatian-pemkot>
3. <https://m.bisnis.com/amp/read/20221005/407/1584369/kas-stunting-di-kota-samarinda-turun-094-persen-dari-tahun-lalu>
4. <https://bappedalitbang.samarindakota.go.id/laman/10-program-unggulan-walikota-samarinda>

5. Stunting data. (Samarinda City Health Service, 2021).
6. <https://stunting.go.id/>
7. <https://kaltimtoday.co/hasil-survei-ssgi-2022-kukar-dan-samarinda-tertinggi-prevalensi-balita-stunting-di-kaltim>
8. Presidential Regulation Number 72 of 2021 concerning the Acceleration of Reducing Stunting
9. <https://diskominfo.kaltimprov.go.id/index.php/government/6-kabupatenkota-di-kaltim-angka-stunting-di-atas-rerata-provinsi>
10. <https://jdih.samarindakota.go.id/produk-Hukum/592358f6-4852-11ed-9a7c-7cd30a6821ab?purpose=download> Perwali No. 102 of 2021 concerning reducing stunting in Samarinda City
11. <https://headlinekaltim.co/dinkes-samarinda-target-tekan-angka-stunting-besar-11-persen/?amp>
12. Paulo Freire, Politics of Education: Culture, Power and Liberation, Translator: Agung Prihantoro and Fuad Arif Fudiyartanto, Cet. VI, (Yogyakarta: Student Library, 2007), p. xvii.
13. Machfoedz I. Quantitative and qualitative research methodology in the fields of health, nursing, midwifery, medicine. Makassar: Fitramaya; 2010.
14. Nurfatimah, et al. Stunting prevention behavior in pregnant women. 2020;15(2):97-104
ISSN: 1907-459X
e-ISSN: 2527-7170

© 2023 Lesmana et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:

<https://www.sdiarticle5.com/review-history/109410>